

Introduction to Statistics and Data Analysis

Working With Your Calculator

What kind of calculator do you have? _____

Do you have the manual? _____

(If not, you can find it online: www.education.ti.com for TI's)

Most calculators come with Descriptive Statistics. Some also come with Inferential Statistics, some you can upgrade to perform Inferential Statistics with free downloads. Today we'll be making use of **Descriptive Statistics**.

****Get into a group with other students who have the same calculator.****

The table below estimates the rate of sports-related injuries treated in U.S. hospital emergency departments in 1997 (from *Injury Facts*, National Safety Council, 1999).

1. Enter the "Injuries Per 1000 Participants" values into a list in your calculator. (The lists may be named list1, list2, ...OR L1, L2, ...,OR xstat, ystat, ...).

Sport	Injuries Per 1000 Participants
Archery	0.7
Baseball, softball	10.7
Basketball	19.4
Bicycle riding	12.1
Billiards, pool	0.1
Bowling	0.5
Fishing	1.6
Football	16.6
Golf	1.5
Ice hockey	40.8
Ice Skating	3.2
Racquetball	2.3
Roller skating	4.1
Skateboarding	7.6
Snowboarding	13.4
Soccer	10.9
Swimming	1.4
Tennis	2.0
Volleyball	3.8
Water skiing	1.6
Weight lifting	1.8

WRITE INSTRUCTIONS FOR ENTERING DATA INTO YOUR CALCULATOR.

What is the name of the list where you stored the data? _____

2. Obtain the mean injury rate for the sports in the sample.

WRITE INSTRUCTIONS FOR OBTAINING THE MEAN WITH YOUR CALCULATOR.

MEAN INJURY RATE _____

3. Display the injury rates in a graph (e.g. bar graph or histogram).

WRITE INSTRUCTIONS FOR OBTAINING A GRAPH WITH YOUR CALCULATOR.

ROUGHLY DRAW THE GRAPH BELOW

Bonus:

- a. Can you make a column named “rate” that contains the data?
- b. Can you sort the data so that the list is in order from lowest to highest?